Applicant : Makoto Izawa Attorney's Docket No.: 10973-111001 / K43-Serial No. : 10/716,245 160304M/SMI

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Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) An irradiating direction control apparatus of a headlamp for a vehicle which controls an irradiating direction of the headlamp for the vehicle depending on a change in an posture of the vehicle, comprising:

vehicle posture detecting means for detecting the change in the posture of the vehicle; irradiation control means for calculating a pitch angle indicative of a vertical inclined posture in a forward direction of the vehicle based on information detected by the vehicle posture detecting means and computing a control amount for correcting an optical axis of irradiation related to the headlamp for the vehicle, and setting a ground angle of the optical axis of the irradiation in a deceleration of the vehicle to be smaller than a ground reference angle of the optical axis of the irradiation during stop or constant speed running of the vehicle, thereby carrying out a correcting calculation for maintaining a forward visible distance of the vehicle to be constant; and

driving means for changing a direction of the optical axis of the irradiation of the headlamp for the vehicle upon receipt of a control command sent from the irradiation control means,

wherein when a ground reference angle of the optical axis of the irradiation is represented as " α ", a ground clearance of the headlamp for the vehicle is represented as "Hhl" and a forward visible distance of the vehicle is represented as "L", the irradiation control means subtracts an angle obtained as an inverse tangent of a ratio "Hhl/L" from the ground reference angle " α " and sets the value thus obtained as a correction value to compute a control amount for correcting the optical axis of the irradiation based on an amount obtained by correcting the value of the pitch angle.

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2. (Canceled)

(Original) The irradiating direction control apparatus of a headlamp for a vehicle 3. according to claim 1, further comprising running state detecting means for detecting a running state of the vehicle,

wherein when an acceleration in a deceleration of the vehicle is detected by the running state detecting means, the irradiation control means adds a correction amount which is proportional to an absolute value of the acceleration to a control amount determined by the pitch angle.

4. (Currently amended) An irradiating direction control apparatus of a headlamp for a vehicle which controls an irradiating direction of the headlamp for the vehicle depending on a change in an posture of the vehicle, comprising:

vehicle posture detecting means for detecting the change in the posture of the vehicle; irradiation control means for calculating a pitch angle indicative of a vertical inclined posture in a direction of advance of the vehicle based on information detected by the vehicle posture detecting means and computing a control amount for correcting an optical axis of irradiation related to the headlamp for the vehicle, and setting a ground angle of the optical axis of the irradiation in an acceleration of the vehicle to be greater than a ground reference angle of the optical axis of the irradiation during stop or constant speed running of the vehicle, thereby carrying out a correcting calculation for maintaining a forward visible distance of the vehicle to be constant; and

driving means for changing a direction of the optical axis of the irradiation of the headlamp for the vehicle upon receipt of a control command sent from the irradiation control means,

wherein when a ground reference angle of the optical axis of the irradiation is represented as "\alpha", a ground clearance of the headlamp for the vehicle is represented as "Hhl" and a forward visible distance of the vehicle is represented as "L", the irradiation control means subtracts an

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angle obtained as an inverse tangent of a ratio "Hhl/L" from the ground reference angle "\alpha" and sets the value thus obtained as a correction value to compute a control amount for correcting the optical axis of the irradiation based on an amount obtained by correcting the value of the pitch angle.

5. (Original) The irradiating direction control apparatus of a headlamp for a vehicle according to claim 4, further comprising running state detecting means for detecting a running state of the vehicle,

wherein when an acceleration in an acceleration of the vehicle is detected by the running state detecting means, the irradiation control means subtracts a correction amount which is proportional to an absolute value of the acceleration from a control amount determined by the pitch angle.